

Lamar County is a rural county in Georgia with poor Cellular and Internet infrastructure. Like many low population density areas, Lamar County depends heavily on various low band radio communication systems as well as amateur radio operators. During an actual public emergency within the past year, communications via cellular phone and Internet were completely impossible. Lamar County was forced to rely on radio communications outside normal VHF and UHF frequencies.

The Lamar County Emergency Management Agency and local emergency personnel feel it is important to address comments made in behalf of the IEEE Power System Relaying Committee. While we generally agree with the comments by Mark Simon, we feel key points are understated.

Much of this debate seems to center around amateur radio, drawing attention away from Military Affiliate Radio Systems, National Guard frequencies, local Emergency Management frequencies, and agencies such as the American Red Cross. All of these systems use frequencies inside the spectrum proposed in BPL systems. First responders depend on all of these systems as heavily as amateur radio.

These systems already suffer occasional communications difficulty from unintentional part 15 radiators, most of which are illegal part 15 emissions from poorly installed or maintained power lines. In any given populated area we can find dozens of power line radiation problems. In a recent disaster drill the local Emergency Management office was plagued by power line noise, which limited communications range.

Mark Simon (representing IEEE Power Relaying Committee) and utility company representatives filing comments are correct in pointing out a lack of documented BPL complaints, but measured signal levels and traditional well-founded engineering clearly tells us power lines make very poor transmission lines for frequencies above VLF. Conductor spacing is generally too wide, balance is poorly maintained, and non-radiation is more wishful thinking than fact.

Utility companies already are sluggish at best and non-responsive at worse when responding to and curing problems caused by unintentional power line installation problems. This is clearly evidenced by many complaints requiring FCC intervention. It is quite possible the lack of complaints cited by opponents and proponents of BPL are due to poor handling of complaints or lack of awareness by people experiencing problems. This is why we need to look for potential problems in trial systems, not wait for problems to appear long after systems are widely installed.

Many interference complaints drag on for years, such as recent interference problems caused by poor connections on Cinergy Corporation power lines near WLW. This one particular case is a good example of how utility companies fail to understand repercussions of what for radio amount to major engineering shortfalls, but for power delivery are acceptable. BPL radio frequency signals directly induced into power lines heavily depend on good connections to avoid generating spurious frequencies from intermodulation products.

Utility companies lack the technical foundation, resources, and manpower to adequately maintain what they already provide, as evidenced by the recent power grid failure. It would be best if our utility companies concentrated more on their number one job, and less on implementing systems that are generally not needed, will likely cause interference, and that they are not experienced with.

We urge the FCC to be very conservative, and to proceed with great caution. Once a system is implemented or a rule change is established, it will be very difficult and expensive to undo it. We would urge the FCC to consider tightening part 15 rules and enforcement, not relaxing rules that are already too loosely followed.

Respectfully,
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